



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/939,451	08/24/2001	James T.C. Yuan	9584/52	3832
7590	08/27/2004			
LINDA K. RUSSELL AIR LIQUIDE 2700 POST OAK BLVD SUITE 1800 HOUSTON, TX 77056			EXAMINER WEINSTEIN, STEVEN L	
			ART UNIT 1761	PAPER NUMBER

DATE MAILED: 08/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/939,451	YUAN, JAMES T.C.
	Examiner	Art Unit
	Steven L. Weinstein	1761

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 10 May 2004.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-7 and 10-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-7 and 10-32 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date _____
- 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Brunner ('874) for the reasons given in the Office action mailed January 23, 2004.

It is noted that applicants have urged that Brunner does not "claim" all of the elements of the claim. A reference does not have to claim the elements of a claim, only disclose the elements of a claim. Also, applicants appear to be reading into claims 1 and 17 more than what is recited. The recited steps are not linked chronologically. Thus, claim 1 can be read that the food product is packaged (i.e. exists in a modified atmosphere which modified atmosphere has occurred due to irradiation) and oxidants are removed from the irradiated, modified atmosphere which Brunner ('874) does or claim 1 can also be read as using oxygen scavengers to remove oxidants from an atmosphere that is already modified by having oxidants removed during continuous scavenging, which Brunner also does. There simply is no sequence to the steps recited. It is also noted that applicant's specification in one embodiment defines the phrase "oxygen is removed from the modified atmosphere" to mean by packaging the product in a substantially oxygen free modified atmosphere. Thus, a modified atmosphere was created outside of the package and added to it by using, e.g. inert gas or vacuum. Thus, based on applicant's specification, which disclose the use of inert gas (or even vacuum) with/without scavengers, Brunner anticipates claim 1 which is

readable on the species of inert gas as the source of the modified atmosphere. As a final point to this issue of the breadth of the claim and applicants disclosed embodiments, reference is made to applicants' claim 2, wherein it is recited that "removing oxidants from the modified atmosphere comprises packaging the food product using a substantially oxidant free modified atmosphere" which, of course, is what Brunner discloses.

Claims 22 and 27-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Todd ('879) for the reason given in the Office action mailed January 23, 2004.

As with claims 1 and 17 above, there is no sequence to the recited steps so that by applying an oxidant reactive chemical substance to a food product, Todd packages a food product in a substantially oxidant free modified atmosphere (after a period of time) and also irradiates the food product.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 3 and 10-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brunner ('874) in view of Titchenal et al ('092), Weinke ('642), and Hirsch et al ('672), further in view of Urbain ('369) for the reasons given in the last Office action mailed January 23, 2004.

Claims 4-7, 18-21, 22-27 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brunner ('874) in view of Todd ('879) for the reasons given in the Office action mailed January 23, 2004.

Claims 23-26 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over the reference as applied to claims 4-7, 18-27, and 31 above, and further in view of Tichenal et al ('092), Weinke ('642) and Hirsch et al for the reasons given in the Office action mailed January 23, 2004.

Claims 23-26 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Todd as applied to claims 4—7, 18-27 and 31 above, and further in view of Tichenal et al ('092), Weinke ('642) and Hirsch et al for the reasons given in the Office action mailed January 23, 2004.

Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Todd ('879) in view of Brunner ('874) for the reasons given in the Office action mailed January 23, 2004.

All of applicants' remarks filed May 10, 2004 have been fully and carefully considered but are not found to be convincing. Applicants' comments regarding Brunner and the 35USC102 rejection has been fully addressed above. In short, Brunner discloses it was known in the prior art to package food in an inert gas or low O₂ atmosphere, which is readable on applicant's claim as defined by applicant's embodiment. In fact, there is no claim that is limited to positively reciting the combination of initially providing a package with a modified atmosphere and then allowing an added oxygen binding or removing agent to further modify the modified.

atmosphere which is what applicants' appear to be urging. The urging that Todd is not applicable against claim 22 has also been addressed above.

On page 9 of the remarks, each reference is argued separately and not accurately rather than addressing the art taken as a whole. Contrary to what is urged, Brunner teaches that in order to eliminate irradiated oxygen damage it was known to reduce the oxygen content in a container containing food to be irradiated and wherein the food can be meat. As pointed out in the last Office action, Brunner teaches that the oxygen can be reduced by providing a vacuum, inert gas or an oxygen remaining agent. Brunner teaches all three techniques work to reduce oxygen and thus irradiated oxygen damage. Brunner prefers the oxygen-removing agent over the prior art techniques because it was cheaper. In any case, it is perfectly clear that Brunner teaches it was conventional to evacuate or provide an inert gas atmosphere and then irradiate fresh meat in a sealed package and it was also conventional to provide an oxygen removal agent. Titchenal, Weinke and Hirsch teach that if meat is going to be stored in a low to zero oxygen atmosphere, one should provide a multi-layer packaging material to allow the meat to once again be exposed to oxygen at the point of sale to redden the meat. None of the secondary references need to deal with irradiation or oxygen removing agents. They are general teachings to employ the recited packaging materials under less than atmospheric oxygen. Since Brunner teaches such storage conditions, the art taken as a whole would fairly teach modifying Brunner and providing such a conventional packaging material for its art recognized and applicants' disclosed reason.

The remainder of the remarks follows in a similar incorrect vein. That is, the remarks are based on reading Brunner only for its contribution to the art and not what is disclosed as prior art. It is absolutely incorrect to state that Brunner is only enabled with the use of an oxygen-binding medium and does not teach or suggest a modified atmosphere. A reference is good for everything disclosed within it. Brunner discloses two techniques to reduce irradiated oxygen that were prior art to him and discloses one additional technique. They are all prior art. In fact, although not positively recited, as noted above, the art taken as a whole would fairly suggest to combine a conventional oxygen removing agent with an initial conventional modified atmosphere containing reduced oxygen if one wanted to reduce the chance of the known problem of irradiation oxygen damage by reducing the oxygen content in the container to as close to zero as possible, which the art teaches reduces such chance. Note, e.g. that Brunner discloses that by adding a chemical removing agent, "any" oxygen which is entrapped is bound by the medium (column 3, line 53 plus).

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven L. Weinstein whose telephone number is (571) 272-1410. The examiner can normally be reached on Monday-Friday from 7:00 a.m. to 3:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on (571) 272-1398. The fax phone number for the organization where this application is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

S.L. Weinstein/dh
August 20, 2004



STEVE WEINSTEIN
PRIMARY EXAMINER
8/26
1761